



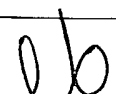
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/485,097	03/08/2000	BENNY MARTIN MATHIESEN	12875.10USWO	1469
23552	7590	07/14/2004	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			GOFF II, JOHN L	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/485,097	Applicant(s) MATHIESEN, BENNY MARTIN	
	Examiner John L. Goff	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8 and 14 is/are allowed.
- 6) ☒ Claim(s) 9-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the appeal brief filed on 4/23/04, PROSECUTION IS HEREBY REOPENED.

A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102/103

3. Claims 9 and 10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sumitomo (JP 52-6782).

Sumitomo discloses a PTFE film melt adhered to a (woven), e.g. glass fiber fabric, in a heat (e.g. 390 °C) and pressure (e.g. 5 to 10 Kg/cm² (0.5 to 1 N/mm²)) process. (English Translation Abstract and, in the translation provided: Page 2, last line thru page 3, line 5 and page 3, lines 12-17). It is noted product claim 9 requires particular laminating conditions. These

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laminating conditions are method limitations, and the patentability of a product does not depend on its method of production such that because the structure taught by Sumitomo is the same (i.e. not materially different) as that claimed Sumitomo anticipates claims 9 and 10. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to experimentally determine/optimize the appropriate laminating conditions as a function of the desired product as doing so would have required nothing more than ordinary skill and routine experimentation, it being noted the product taught by Sumitomo is seen to be the same as that claimed.

4. Claims 11-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Smuck et al. (DE 4202920).

Smuck et al. disclose a laminating apparatus composed of a heated roller pair/couple and a cooled/cooling roller pair/couple, which couples act successively (and in the order stated) on superposed plies of substrate material to be bonded. (Figs. 3-4, English Translation Abstract and, in the translation provided: Page 5, lines 8-13 and page 12, line 19-21 and page 13, lines 12-14). All of the essential structural and constructional limitations of these claims are seen to be satisfied by this reference, with the following being additionally advanced: (a) Smuck et al. fairly and clearly provide (page 5, lines 8-13 of the translation) for CONTROL of both the pressure and heat (or cooling) applied by their two (i.e. heated and cooled/cooling) roller pairs or couples such that this controlled apparatus is seen to be capable of performing the claimed heating and cooling regimen and as such anticipates the claims. (b) As to the specific laminating conditions, these conditions are method limitations and dependent upon many variables including the thickness of the laminate. Smuck et al. are not limited to a particular thickness such that one of

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ordinary skill in the art at the time the invention was made would have readily appreciated determining optimal laminating conditions based upon the specifics of the laminate such as the thickness without requiring anything other than ordinary skill and routine experimentation.

Claim Rejections - 35 USC § 103

5. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandt (U.S. Patent 2,833,686) in view of Sumitomo.

Sandt discloses that in the bonding of PTFE films to ANY heat resistant material substrate in a heat and pressure bonding process, it is preferred to cool the laminate so formed under pressure, i.e. by maintaining the laminating pressure, to minimize unequal contraction, i.e. shrinking, of the film (column 1, lines 15-17 and 32-41 and column 2, lines 4-72 and column 3, lines 1-4 and column 5, lines 35-40), such that it would have been obvious to one of ordinary skill in this art to employ in Sandt any well known and conventional heat resistant material such as glass fiber fabric as this was a well known and conventional material used in the art to form products of the type taught by Sandt as shown for example by Sumitomo wherein only the expected results would be achieved. Sumitomo is described above in full detail.

It is noted product claim 9 requires particular laminating conditions. These laminating conditions are method limitations, and the patentability of a product does not depend on its method of production such that because the structure taught by Sandt as modified by Sumitomo is the same (i.e. not materially different) as that claimed Sandt as modified by Sumitomo anticipates claims 9 and 10. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to experimentally determine/optimize the appropriate

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laminating conditions as a function of the desired product as doing so would have required nothing more than ordinary skill and routine experimentation, it being noted the product taught by Sandt as modified by Sumitomo is seen to be the same as that claimed.

Allowable Subject Matter

6. Claims 1-8 and 14 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

Claims 1-8 and 14 are allowed in view of applicants arguments in the appeal brief filed 4/23/04.

Response to Arguments

8. Applicant's arguments with respect to claims 9-13 have been considered but are moot in view of the new ground(s) of rejection. Regarding claims 9 and 10, applicant argues Sumitomo and Sandt do not teach the claimed cooling time and temperatures. As noted above, claims 9 and 10 are product claims, and the patentability of a product does not depend on its method of production such that Sumitomo and Sandt as modified by Sumitomo teach the claimed structure limitations. Regarding claims 11-13, applicant argues Smuck does not disclose an apparatus that is capable of obtaining the heating and cooling steps used in applicants invention. Smuck et al. disclose a laminating apparatus composed of a controlled heated roller pair/couple and a controlled cooled/cooling roller pair/couple, which couples act successively (and in the order stated) on superposed plies of substrate material to be bonded. It is noted the controlled heated roller pair/couple is capable of controlled heating under a controlled pressure and the controlled cooled/cooling roller pair/couple is a means for fixation capable of controlled cooling under

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pressure wherein the amount of heating, cooling, or pressure is not limited (the heating, cooling, and pressure amounts suggested by Smuck et al. being merely exemplary) such that the apparatus taught by Smuck et al. is capable of performing applicants claimed heating and cooling regimen.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571) 272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John L. Goff



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